# JUL 0 2 2014

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# 510(k) Summary

K141499

This 510(k) summary is submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.87

Establishment Registration Number:

3008008164

Address of Manufacturer:

Synthasome, Inc.

3030 Bunker Hill Street, #308

San Diego, CA 92109

Contact Person:

Anthony Ratcliffe, PhD

President and CEO

Date Prepared:

May 28, 2014

Trade or Proprietary Name:

X-RepairSL

Common or Usual Name:

Surgical mesh

Classification Name:

21 CFR 878.3300, class II, FTL: OWW

Mesh, Surgical, Polymeric

Predicate Device Identification:

X-Repair (K083307)

**Device Description:** 

The X-Repair<u>SL</u> is a bioabsorbable, rectangular, <u>single</u>-layered, flexible, woven surgical mesh manufactured from poly-l-lactic acid (PLLA) fiber. It has locked top and bottom edges and welded ends. It is provided sterile, intended for single use, and labeled non-pyrogenic.

### Intended use and comparison to predicate devices:

X-Repair<u>SL</u> is intended for use in general surgical procedures for reinforcement of soft tissue where weakness exists.

X-Repair<u>SL</u> is also intended for reinforcement of soft tissues that are repaired by suture or suture anchors, during tendon repair surgery including reinforcement of rotator cuff, patellar, Achilles, biceps, or quadriceps tendons.

X-Repair<u>SL</u> is not intended to replace normal body structure or provide the full mechanical strength to support the rotator cuff, patellar, Achilles, biceps, or quadriceps tendons. Sutures, used to repair the tear, and sutures or bone anchors, used to attach the tissue to the bone, provide mechanical strength for the tendon repair.

"Indications for Use" are identical to the predicate X-Repair (K083307) except the addition of "SL" to the Trade Name.

"Directions for Use" are modified in comparison to the predicate X-Repair (K083307) by adding "SL" to the Trade Name and replacing "double" with "single" in the device description.

Product labels have been modified to reflect the single-layer device, the additional sizes and additional part numbers.

## Technological characteristics and comparison to predicate devices:

The technological characteristics are identical to the predicate X-Repair (K083307), namely:

- Have the same indications for use
- Use the same basic technology
- · Have equivalent mechanical properties
- Incorporate the same basic woven fabric design
- Use the same PLLA fiber material
- Are packaged and sterilized using the same materials and processes

Minor changes to the predicate comprise the single layer device, additional widths for the device, starting at 4mm up to 40mm (the largest width of the predicate) and additional lengths for the device, starting at 20mm up to 160mm. In addition, the shelf life has been established at five (5) years.

## Summary of performance data:

Bench testing was conducted to evaluate the tensile strength and suture pullout strength of the subject device. The results showed that the subject device has similar performance characteristics as the predicate device. In addition, the package integrity was tested to evaluate the maintenance of the sterile barrier and the maintenance of mechanical properties up to five years. The results of performance testing demonstrated that the functionality, integrity, and safety of the X-Repair are adequate for its intended use and do support a determination of substantial equivalence.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

July 2, 2014

Synthasome Incorporated
Mr. Anthony Ratcliffe
President and Chief Executive Officer
3030 Bunker Hill Street, Suite 308
San Diego, California 92109

Re: K141499

Trade/Device Name: X-RepairSL Regulation Number: 21 CFR 878.3300 Regulation Name: Surgical mesh

Regulatory Class: Class II Product Code: FTL, OWW

Dated: June 5, 2014 Received: June 6, 2014

#### Dear Mr. Ratcliffe:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

# David Krause -S

for Binita S. Ashar, M.D., M.B.A., F.A.C.S.
Director
Division of Surgical Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

# DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

Form Approved: OMB No. 0910-0120 Expiration Date: December 31, 2013 See PRA Statement on last page.

| Indications for Use  |  | See PRA Statement on last page.   |
|--|--|---|
| 510(k) Number (if known)   |  |   |
| K141499  |  |   |
| Device Name  |  |   |
| X-RepairSL   |  |   |
| ndications for Use (Describe)  |  |   |
| K-RepairSL is intended for use in general surgical procedures for reinf  | forcement of soft tissue                       | e where weakness exists.  |
| X-RepairSL is also intended for reinforcement of soft tissues that are including reinforcement of rotator cuff, patellar, Achilles, biceps, or q   | repaired by suture or s<br>quadriceps tendons. | uture anchors, during tendon repair surger                                      |
| X-RepairSL is not intended to replace normal body structure or provion patellar, Achilles, biceps, or quadriceps tendons. Sutures, used to reptissue to the bone, provide mechanical strength for the tendon repai | air the tear, and suture                       | strength to support the rotator cuff,<br>es or bone anchors, used to attach the |
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| Turn of the (Calcul and or hath, as applicable)  |  |   |
| Type of Use (Select one or both, as applicable)  Prescription Use (Part 21 CFR 801 Subpart D)  | Over-The-Coun                                  | ter Use (21 CFR 801 Subpart C)  |
| Prescription Use (Part 21 CFR 601 Subpart D)   | CJ OVEI-THE-OUGH                               |   |
| PLEASE DO NOT WRITE BELOW THIS LINE - CO   | ONTINUE ON A SEP                               | ARATE PAGE IF NEEDED.   |
| FOR FDA USE ONLY   |  |   |

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

Peter L. Hudson -S